IDW AF 2654

PTO/SB/21 (09-04)
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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission: 36

Application Number	09/328,025
Filing Date	06/08/1999
First Named Inventor	Johannes M. M. Verbakel
Art Unit	2654
Examiner Name	Vijay B. Chawan
Attorney Docket Number	PHN-16,967

ENCLOSURES *(Check all that apply)*

- [x] Fee Transmittal Form
- [x] Fee Attached
- [ ] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Reply to Missing Parts/ Incomplete Application
  - [ ] Reply to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
  - [ ] Landscape Table on CD
- [ ] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [x] Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- [ ] Proprietary Information
- [ ] Status Letter
- [ ] Other Enclosure(s) (please Identify below):

Remarks

Enclosed is an Appeal Brief with the required fee filed in support of the Notice of Appeal filed December 24, 200 .

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	LEIMBACH ASSOCIATES		
Signature	James D. Leimbach		
Printed name	James D. Leimbach		
Date	February 24, 2005	Reg. No.	34,374

CERTIFICATE OF TRANSMISSION/MAILING

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Signature	James D. Leimbach		
Typed or printed name	James D. Leimbach	Date	February 24, 2005

PTO/SB/17 (12-04v2)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT	($)	500.00

Complete if Known	
Application Number	09/328,025
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First Named Inventor	Johannes M. M. Verbakel
Examiner Name	Vijay B. Chawan
Art Unit	2654
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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES Fee ($)	FILING FEES Small Entity Fee ($)	SEARCH FEES Fee ($)	SEARCH FEES Small Entity Fee ($)	EXAMINATION FEES Fee ($)	EXAMINATION FEES Small Entity Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims _____ - 20 or HP = _____ x Fee ($) _____ = Fee Paid ($) _____

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims _____ - 3 or HP = _____ x Fee ($) _____ = Fee Paid ($) _____

HP = highest number of independent claims paid for, if greater than 3.

Multiple Dependent Claims: Fee ($) _____ Fee Paid ($) _____

3. APPLICATION SIZE FEE

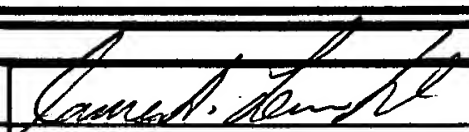
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets _____ - 100 = _____ / 50 = _____ (round up to a whole number) x Fee ($) _____ = Fee Paid ($) _____

4. OTHER FEE(S)

	Fees Paid ($)
Non-English Specification, $130 fee (no small entity discount)	_____
Other (e.g., late filing surcharge): Filing of Appeal Brief	500.00

SUBMITTED BY

Signature		Registration No. (Attorney/Agent) 34,374	Telephone (585) 381-9983
Name (Print/Type)	James D. Leimbach		Date 02/24/2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

Johannes M. M. Verbakel et al.

TRANSFERRING COMPRESSED AUDIO VIA A PLAYBACK BUFFER

Serial No. 09/328,025

Filed: June 8, 1999

Group Art Unit: 2654

Examiner: Vijay B. Chawan

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Name: James D. Leimbach
Registration No. 34,374
Date: February 24, 2005

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Alexandria VA. 22313-1450

Sir:

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Real party in interest

The real party of interest is the Assignee who is U. S. Philips Corporation, a corporation existing under the laws of the State of Delaware (hereinafter Appellant).

Related appeals and interferences

There are no related appeals or interferences to the present application that are known to appellant, the appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Status of the Claims

Claims 1-9, 12, 13 and 15-22 as are drawn to transferring, playing and recording data in real time. Claims 1-9, 12, 13 and 15-22 stand rejected and are the claims that are currently being appealed. Claims 10, 11 and 14 have been cancelled. A copy of claims 1-9, 12, 13 and 15-22 is contained in Appendix I following this brief.

Status of the Amendments After Final

A response was filed subsequent to the final rejection to overcome the Examiner's rejection of claims 1-9, 12, 13 and 15-22 under the provisions of 35 U.S.C. §112(a), second paragraph and the Examiner's rejection of claims 1-9, 12, 13 and 15-22 under the provisions of 35 U.S.C. §103(a). The Examiner in an Advisory Action dated November 17, 2004 indicated that the rejection of claims 1-9, 12, 13 and 15-22 under the provisions of 35 U.S.C. §112(a), second paragraph and the Examiner's rejection of claims 1-18 and 20-27 under the provisions of 35 U.S.C. §103(a), stand.

Summary of the Claimed Subject Matter

The appealed claims define subject matter for a method and device for transferring, playing and recording audio information. More specifically, the appealed claims relate to techniques for determining the size of a playback buffer prior decoding data with the playback buffer.

Appealed claim 1 defines a method for transferring real time information, in particular audio information, as stated on page one of the specification to the present invention lines 1-6. The various mechanisms and that enable this transferring of audio information are described within the specification on page 2, beginning at line 15 and proceeding through page 3, line 13.

Appealed claim 1 further defines subject matter for the encoding of consecutive segments of the real time information to compressed real time data in frames, is discussed on the specification beginning in at page 1, line 27 and proceeding through page 2, as being known from the prior our referenced document D1 "Improved Lossless Coding of 1-bit Audio Signals" by F. Bruekers et al., presented at the 103rd AES Convention during September 26-29 in 1997 (hereinafter referred to as prior art reference D1).

Appealed claim 1 further defines subject matter for the transmitting of a signal carrying the compressed real time data in the specification to the present invention at page 2, lines 2-5 as also being known from prior our reference D1.

Appealed claim 1 further defines subject matter for receiving the signal and retrieving the compressed real time data during reading the record carrier and the retrieve compressed audio is passed the playback buffer at a fixed rate on page 2 of specification, lines 9-10 again within prior art reference D1.

Appealed claim 1 further defines subject matter for the storing of the received compressed real time data in a playback buffer, is discussed on page 2 the specification, lines 10-13 as being detailed prior art reference D1.

Appealed claim 1 further defines subject matter for decoding the compressed real time data from the playback buffer, which is discussed with in the specification to the present invention, beginning on page 6, line 24 and proceeding through page 7, line 7.

Appealed claim 1 further defines subject matter for determining, before transmitting, a buffer occupancy for at least one frame as described within the specification to the present

invention to page 6 of the specification of the present invention beginning at line 12, wherein the buffer occupancy is described as being determined during recording to control the retrieval and decoding process in the playback device. The buffer occupancy indicates an amount of data to be present in the playback buffer at the start of decoding of a corresponding frame. The playback device controls the decoding process to start when the amount indicated in the buffer occupancy is present in the playback buffer (see page 6, lines 14-20). This process is further described within the specification to the present invention on page 12, lines 6-16. Appealed claim 1 further defines that date and buffer occupancy is indicative of an amount of compressed real time data to be present in the playback buffer at the start of decoding the frame as described by the specification to present invention beginning on page 6, line 26, that discusses the amount of data in the playback buffer. According to the invention decoding is postponed until the buffer level reaches the level indicated by buffer occupancy (see page 7, lines 1-3). Further as an illustrated by second step 52 within figure 5 and described in the specification on page 12, lines and 23-25, the controlling of the retrieving and/or the decoding in dependence on said transferred buffer occupancy and transferring the buffer occupancy via the signal, are described on page 2 of the specification, lines 17-23. Still further, the description related to Fig. 3 beginning on page 12 of the specification, line 6, discusses the control of a recording device for determining buffer occupancy. The control unit 20 is arranged for determining the buffer occupancy such that the maximum level of the buffer occupancy does not overflow the playback buffer.

Appealed claim 2 defines subject matter for a signal carrying real time information, in particular audio information, which real time information is encoded to compressed real time data in frames relating to consecutive segments of the real time information, wherein the signal comprises a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed real time data to be present in a playback buffer at the start of decoding said frame. Page 2 of the specification, lines 24-27 describe a buffer occupancy for at least one frame, which buffer for at least one frame, which buffer occupancy is indicative of an amount of compressed real time data to be present in a playback buffer at the start of decoding said frame. The subject matter of appealed claim 2 is further described on page 3 of the specification to the present invention lines 14-31.

Appealed claim 3 defines subject matter for a method for recording audio information on a record carrier. A record carrier 11 is illustrated in Fig. 1. The method of appealed claim 3 further defines encoding consecutive segments of the audio information to compressed audio data in frames, and recording the compressed audio data, determining a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding said frame, and recording the buffer occupancy on the record carrier; which s described in the specification to the present invention from page 5, line 10-page 7, line 7.

Appealed claim 6 defines subject matter for a recording device for recording audio information on a record carrier including a compression element that is configured to encode consecutive segments of the audio information to compressed audio data in frames (see specification page 5, lines that 13-24).

Appealed claim 6 further defines that the recording element that is configured to record the compressed audio data on the record carrier is shown in figure 3 as write head 39 and described within the specification to the present invention on page 11, lines 23-34.

Appealed claim 6 further defines that the device comprises an occupancy determinator that is configured to determine a buffer occupancy for at least one frame is provided by control unit 20 within Figure 3 and described within the specification on page 12, lines 6-11.

Appealed claim 6 further defines that the buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding the frame, and the recording element is configured to record the buffer occupancy on the record carrier. Page 6 of the specification of the present invention beginning at line 12, describes the buffer occupancy as being determined during recording to control the retrieval and decoding process in the playback device. The specification to the present invention further states that the buffer occupancy indicates an amount of data to be present in the playback buffer at the start of decoding of a corresponding frame. The playback device controls the decoding process to start when the amount indicated in the buffer occupancy is present in the playback buffer (see page 6, lines 14-20).

Appealed claim 8 defines subject matter for a record carrier carrying audio information, which audio information is encoded to compressed audio data in frames relating to consecutive segments of the audio information, comprising a-buffer occupancy for at least one frame, which

buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding the frame; which s described in the specification to the present invention from page 5, line 10-page 7, line 7.

Grounds of Rejection to be Reviewed on Appeal

Appealed claims 1-9, 12, 13 and 15-22 stand rejected under the provisions of 35 U.S.C. §112(a), second paragraph. The Examiner's position expressed in the August 25, 2004 and Final Office Action and affirmed by the advisory Action dated November 17, to 2004 is that the term "amount of" within the rejected claims is a relative term which renders these claims indefinite.

Appealed claims 1-9, 12, 13 and 15-22 stand rejected under the provisions of 35 U.S.C. §103(2) as being anticipated being anticipated by U.S. Patent No. 6,353,703 issued to Tatsumi et al. (hereinafter referred to as Tatsumi et al.).

Argument

I. The rejection of appealed claims 1-9, 12, 13 and 15-22 stand rejected under the provisions of 35 U.S.C. §112(a), second paragraph

A. The rejection under 35 U.S.C. §112(a), second paragraph

Appealed claims 1-9, 12, 13 and 15-22 stand rejected under the provisions of 35 U.S.C. §112(a), second paragraph. The Examiner's position expressed in the August 25, 2004 and Final Office Action and affirmed by the advisory Action dated November 17, to 2004 is that the term "amount of" within the rejected claims is a relative term which renders these claims indefinite. The Examiner's position is that the term "amount of" is not defined by the rejected claims, and that the specification does not provide a standard by which one of ordinary skill within the art could ascertain and reasonably be appraised of the scope of the invention.

B. The claims particularly point out and distinctly claim the subject matter which the appelant regards as the invention

The appellants, respectfully, point out that appealed claims define subject matter for a playback buffer and a determination of a buffer occupancy that is indicative of an amount of data within the playback buffer. The appellants, respectfully, assert that the recitation within the appealed claims wherein a determination is made for of a buffer occupancy that is indicative of an amount of data within the playback buffer particularly points out and distinctly claims the subject matter of the invention. The appellant's position is that the recitation within the rejected claims wherein a determination is made for of a buffer occupancy that is indicative of an amount of data within the playback buffer clearly indicates to a person skilled in the art the scope of the invention that is covered by the rejected claims.

The terminology recited by the appealed claims is defined by the specification to the present invention in clear and concise terms that provides any person skilled in the art with full knowledge of the scope of the subject matter that is covered by the rejected claims. The appellants draw attention to page 6 of the specification of the present invention beginning at line 12, wherein the buffer occupancy is described as being determined during recording to control the retrieval and decoding process in the playback device. The buffer occupancy indicates an amount of data to be present in the playback buffer at the start of decoding of a corresponding frame. The playback device controls the decoding process to start when the amount indicated in the buffer occupancy is present in the playback buffer (see specification page 6, lines 14-20).

The appellants further draw attention to the description of Fig. 4 beginning on page 6 of the specification, line 26 that discusses the amount of data in the playback buffer. According to the invention decoding is postponed until the buffer level reaches the level indicated by buffer occupancy (see page 7, lines 1-3). The appellants, respectfully, submit that the subject matter defined by the rejected claims is described by the specification in a manner that will be clearly understood by a person skilled in the art as to the scope of the subject matter covered by the appealed claims.

The appellants would still further like to draw attention to the description of Fig. 3 beginning on page 12 of the specification, line 6, which discusses the control of a recording

device for determining buffer occupancy. The control unit 20 is arranged for determining the buffer occupancy such that the maximum level of the buffer occupancy does not overflow the playback buffer.

The appellants would still further like to draw the Examiner's attention to the description of Fig. 5 beginning on page 12, line 17 of the specification, which details the recording method of the invention. The buffer occupancy is determined based on the amount of compressed audio data. The appellants, respectfully, submit that the subject matter defined by the appealed claims is clearly described by the specification in a manner that will be understood by a person skilled in the art as and appraise a person skilled in the art as to the scope of the subject matter covered by the rejected claims.

In view of the foregoing, the appellant, respectfully, submits that claims 1-9, 12, 13 and 15-22 particularly point out and distinctly claim the subject matter which applicant regards as the invention. Accordingly, the rejection under the provisions of 35 U.S.C. §112(a), second paragraph should be reversed.

II. The rejection of appealed claims 1-9, 12, 13 and 15-22 stand rejected under the provisions of 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,353,703 issued to Tatsumi et al. (hereinafter referred to as Tatsumi et al.)

A. The rejection under the provisions of 35 U.S.C. §102(b)

Appealed claims 1-9, 12, 13, and 15-22 are rejected under the provision of 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,353,703 issued to Tatsumi et al. (hereinafter referred to as *Tatsumi et al.*).

B. The reference

Tatsumi et al. (U.S. Patent No. 6,353,703) teach a method and apparatus for video and audio recording. Col. 10, lines 53-64 of *Tatsumi et al.* states that audio is captured and coded in real time in accordance with the basic capability of a computer that executes decoding. Note that

there is no mention for encoding consecutive segments of the real time information into compressed real time data in frames as recited by rejected. At Col. 23, lines 18-28, of *Tatsumi et al.* teach outputting a signal that has been DCT processed and quantized, however, there is no disclosure or suggestions for transmitting a signal carrying compressed real time data. The output by the quantization means 104 to the inverse-quantization means 107 as taught by *Tatsumi et al.* is not equivalent to transmitting a signal carrying compressed real time data. There is no transmission of compressed real time data by the quantization means 104 to the inverse-quantization means 107. *Tatsumi et al.* teach outputting quantized DCT data to the inverse-quantization means 107. Note that there is no disclosure or suggestion within *Tatsumi et al.* that would lead a person skilled in the art to believe that the quantized DCT data is equivalent to compressed real time data.

Tatsumi et al. at col. 23, lines 29-42 of describe the inverse-quantization means 107 that reverse the quantization process that was previously performed by the quantization means. The quantized DCT data is not compressed real time data. Fig. 2 of *Tatsumi et al.* illustrates the operation of the block diagram illustrated in Fig. 1. *Tatsumi et al.* on col. 24, beginning on line 31, states that the DCT processing means 103 divides the input frame into (8x8) pixel blocks and that the quantization means 104 quantizes the DCT data using a predetermined value. Note that there is no disclosure or suggestion within *Tatsumi et al.* that the DCT data is equivalent to compressed real time data. *Tatsumi et al.* teach that the DCD data is variable length coded however, the variable length coded data is not received by the inverse-quantization means 107. The inverse-quantization means 107 receives quantized DCT data, and not any form of compressed data.

The quantized DCT data that is processed by the inverse-quantization means 107 is not real time data. Fig. 2 of *Tatsumi et al.* clearly illustrates two separate processing paths: case (A) that is performed on the quantized DCT data as described on col. 24, lines 31-52; and case (B) that is performed on quantized DCT data as described on col. 23, lines 52-63. In case (B), it is clearly stated that the inverse-quantization means 107 inversely quantizes the quantized data that has been **previously output to a previous frame picture** (emphasis added). There should be no doubt that the data that the inverse-quantization means 107 inversely quantizes is not real time data but is instead data from a previous frame picture. The data output from the inverse-quantization means 107 is processed by the inverse DCT processing means 108 resulting in

inverse DCT data that is used to generate a prediction picture (see col. 24, lines53-63). The resulting prediction picture is subtracted from the input frame picture (see col. 25, lines 1-3). Note that there is no teaching within *Tatsumi et al.* for the data processed by the inverse-quantization means 107 that is in turn processed inverse DCT processing means 108 and the resulting inverse DCT data to be stored.

The description related to Fig. 50 within *Tatsumi et al.* at col. 87, lines 32-52 discusses a coding-loading evaluating unit that operates on coded audio data. The appellants respectfully point out that the description related to Fig. 50 within col. 87, lines 32-52 of *Tatsumi et al.* relates to coded audio data and is not related to the data processed by the inverse-quantization means 107 that is in turn processed by the inverse DCT processing means 108 resulting in the inverse DCT data. The coded audio data discussed on col. 87, lines 32-52 of *Tatsumi et al.* is the run length coded audio and not the predictive data that was applied against the previously discussed.

Tatsumi et al. teach an encoding system that is configured to selectively drop video frames when the time required for encoding the frames will interfere with the encoding of the corresponding audio information. The appellant respectfully draws attention Fig. 50 of *Tatsumi et al.* The coding-load evaluation unit 2144 of *Tatsumi et al.* determines a rate at which the audio coding unit 2142 is able to compress audio information from a buffer 2103. If the rate is below a given threshold 2110, the coding-load evaluation unit 2144 decouples the output of the video capture unit 2106 from the video coding unit 2107, via the illustrated switch in the evaluation unit 2144. *Tatsumi et al.* do not address the receipt of the encoded information, the determination of a buffer occupancy at a receiver that is necessary to avoid underflow nor overflow. Thus, *Tatsumi et al.* do not teach determining a buffer occupancy that is indicative of an amount of compressed data at a receiver buffer and *Tatsumi et al.* do not teach the inclusion of the determined buffer occupancy with the encoded data being communicated to the receiver.

C. The differences between the invention and the references

Appealed claim 1

Appealed claims 1 defines subject matter for a method for transferring real time information, in particular audio information, the method comprising:

encoding consecutive segments of the real time information to compressed real time

data in frames,

transmitting a signal carrying the compressed real time data,

receiving the signal and retrieving the compressed real time data,

storing the received compressed real time data in a playback buffer,

decoding the compressed real time data from the playback buffer,

determining, before transmitting, a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed real time data to be present in the playback buffer at the start of decoding said frame,

transferring the buffer occupancy via the signal,

controlling the retrieving and/or the decoding in dependence on said transferred buffer occupancy.

The rejection to appealed claim 1 asserts that *Tatsumi et al.* teach a method for transferring real time information, in particular audio information, comprising encoding consecutive segments of the real time information to compressed real time data in frames on Col. 10, lines 53-64. The appellants, respectfully, point out that there is no disclosure, or suggestion, and on Col. 10, lines 53-64 of *Tatsumi et al.* for encoding consecutive segments of the real time information into compressed real time data in frames. *Tatsumi et al.* at col. 10, lines 53-64 teach that audio is captured and coded in real time and that game coding is controlled by a computer. There is no disclosure or suggestion of the subject matter for encoding consecutive segments of the real time information into compressed real time data in frames as recited by rejected Claim 1.

The rejection to appealed claim 1 further asserts that Col. 23, lines 18-28 of *Tatsumi et al.* teach transmitting a signal carrying the compressed real time data. The appellants, respectfully, assert that Col. 23, lines 18-28 of *Tatsumi et al.* teach outputting a signal that has been DCT processed, and quantized; which is not equivalent or suggestive of transmitting a signal carrying compressed real time data. The appellants' position is that the output by the quantization means 104 to the inverse-quantization means 107 is not equivalent to transmitting a signal carrying the compressed real time data. *Tatsumi et al.* teach outputting quantized DCT data to the inverse-quantization means 107 and quantized DCT data is not equivalent compressed real time data. There is no transmission of compressed real time data by the quantization means 104 to the inverse-quantization means 107.

The rejection to appealed claim 1 further asserts that col. 23, lines 29-42 of *Tatsumi et al.* teach receiving the signal and retrieving the compressed real time data. *Tatsumi et al.* at col. 23, lines 29-42 describe the inverse-quantization means 107 that reverse the quantization process that was previously performed by the quantization means. As previously discussed, quantized DCT data is not compressed real time data. The appellants respectfully point out that the description related to Fig. 2 of *Tatsumi et al.* discusses the operation of the block diagram illustrated in Fig. 1. *Tatsumi et al.* on col. 24, beginning on line 31, states that the DCT processing means 103 divides the input frame into (8x8) pixel blocks and that the quantization means 104 quantizes the DCT data using a predetermined value. There is no teaching or suggestion within *Tatsumi et al.* that the DCT data is in any way related to compressed real time data. While, *Tatsumi et al.* teach that the DCD data is variable length coded, the variable length coded data that is taught by *Tatsumi et al.* is not received by the inverse-quantization means 107. The inverse-quantization means 107 receives quantized DCT data, not any form of compressed data as asserted by the rejection made to appealed claim 1.

The quantized DCT data that is processed by the inverse-quantization means 107 is not real time data. Fig. 2 of *Tatsumi et al.* clearly illustrates two separate processing paths: case (A) that is performed on the quantized DCT data as described on col. 24, lines 31-52; and case (B) that is performed on quantized DCT data as described on col. 23, lines 52-63. In case (B), it is clearly stated that the inverse-quantization means 107 inversely quantizes the quantized data that has been **previously output to a previous frame picture** (emphasis added). There should be no doubt that the data processed by inverse-quantization means 107 is not real time data but is instead data from a previous frame picture. The data output from the inverse-quantization means 107 is processed by the inverse DCT processing means 108 resulting in inverse DCT data used to generate a prediction picture (see col. 24, lines53-63 of *Tatsumi et al.*). The resulting prediction picture is subtracted from the input frame picture (see col. 25, lines 1-3 of *Tatsumi et al.*). Note that there is no teaching by *Tatsumi et al.* for storing the data processed by the inverse-quantization means 107 that is in turn processed inverse DCT processing means 108 and the resulting inverse DCT data.

The rejection to appealed claim 1 further asserts that *Tatsumi et al.* teach storing the received compressed real time data in a playback buffer on col. 87, lines 32-52. The appellants, respectfully, point out that this rejection is attempting to apply the description related to Fig. 50

of *Tatsumi et al.* in combination with the previously described elements relating to Figures 1 and 2 of *Tatsumi et al.* The appellant' s position is that this rejection to appealed claim 1 does not provide any coherent rationale for applying the subject matter taught by *Tatsumi et al.* at col. 87, lines 32-52 with the subject matter previously discussed relating to Figures 1 and 2 of *Tatsumi et al.* The description related to Fig. 50 within *Tatsumi et al.* at col. 87, lines 32-52 discusses a coding-loading evaluating unit that operates on coded audio data; however, the Examiner has failed to indicate how the coded data discussed in Fig. 50 and col. 87, lines 32-52 of *Tatsumi et al.* relates to the previously discussed data processed by the inverse-quantization means 107 that is in turn processed by the inverse DCT processing means 108 resulting in the inverse DCT data. Appealed claim 1 defines subject matter for "storing the received compressed real time data in a playback buffer" that specifically relates to data that was retrieved from the received signal. *Tatsumi et al.* on col. 87, lines 32-52 discuss coded audio data that is not in any way related to the data that is processed by the inverse-quantization means 107 and the inverse DCT processing means 108 resulting in the inverse DCT data that was applied to the previously discussed elements. The rejection to appealed claim 1 provides no logical explanation of how the data that is being discussed on col. 87, lines 32-52 of *Tatsumi et al.* can possibly be considered as the same, or at least as being equivalent to, the data being discussed on columns 23 and 24 of *Tatsumi et al.* The coded audio data discussed on col. 87, lines 32-52 of *Tatsumi et al.* is run length coded audio and not the predictive data not processed by the inverse-quantization means 107 and the inverse DCT processing means 108 resulting in the inverse DCT data. The appellant, respectfully, asserts that the mixing and matching of various data paths described by *Tatsumi et al.* do not anticipate appealed claim 1.

The court stated in *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) that a "claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." The appellant, respectfully, assert that the rejection to appealed claim 1 does not set forth each and every element within appealed claim 1 because, simply put, the appealed claim 1 requires processing to be performed on the same data and the rejection to appealed claim 1 attempts to apply different data streams; thus resulting in the rejection to appealed claim 1 not finding all the elements. The courts opinion in *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) states that the "identical invention must be shown

in as complete detail as is contained in the ... claim." The appellant, respectfully asserts that the rejection to appealed claim 1 does not accurately address the elements as claimed but instead cites processing of different data paths within *Tatsumi et al.* against the specific recitation for the processing of a single data path by appealed claim 1. The courts have further opined in *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990) that the "elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required." The appellant's position is not that a litmus test to the terminology the and employed, the appellant's position is simply that the elements of appealed claim 1 should be addressed in a manner equivalent to the subject matter defined by the as required. This has not been done by the rejection to appealed claim 1.

The rejection to appealed claim 1 further asserts that *Tatsumi et al.* teach decoding the compressed real time data from the playback buffer at col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67. The appellant, respectfully, points out that column 87, 88 and 89 of *Tatsumi et al.* is describing the coding of audio and video signals and not the decoding of compressed data. *Tatsumi et al.*, at col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67, are describing a coding-loading evaluating unit that operates on coded audio data. As previously discussed, the rejection to appealed claim 1 has not shown any correlation between the coded data discussed in the description related to Fig. 50 on col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67of *Tatsumi et al.* to the previously discussed data processed by the inverse-quantization means 107 that is in turn processed by the inverse DCT processing means 108 resulting in the inverse DCT data that was applied against previously discussed elements.

The rejection to appealed claim 1 asserts that *Tatsumi et al.* teach determining, before transmitting, a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed real time data to be present in the playback buffer at the start of decoding said frame at col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67. The appellant, respectfully, asserts that there is no teaching or suggestion for determining, before transmitting, a buffer occupancy for at least one frame within *Tatsumi et al.* Initially, as discussed above, the data which the Examiner previously applied to the step of transmitting is not the same data that is being discussed by *Tatsumi et al.* at col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67, and accordingly, the subject matter defined by appealed claim 1 is anticipated by the random combination of processes that occur within different data paths absent some logical reason. Col.

87, lines 32-52 and col. 87, line 62-col. 88, line 67 of *Tatsumi et al.* do not teach or suggest determining, before transmitting, a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed real time data to be present in the playback buffer at the start of decoding of a frame. *Tatsumi et al.* teach that the "signals are stacked in the audio buffering unit 2203 which rewrites the pro-audio buffer size based on the current audio buffer size (see col. 88, lines 39-41). *Tatsumi et al.* does not disclose or suggest any determination of an amount indicative of the compressed data in a playback buffer prior decoding. Moreover, *Tatsumi et al.* do not disclose or suggest determining before transmitting an amount of compressed real time data to be present in the playback buffer **at the start of** decoding. The appellant respectfully points out that the rejection to appealed claim 1 does not indicate which elements within columns 87 and 88 of *Tatsumi et al.* are being read upon the subject matter of appealed claim 1. The basic premise being discussed on column 87 and 88 of *Tatsumi et al.* is that the coding-loading evaluating unit 2253 uses the predicted audio buffer size to determine if video signals are to be input into the video coding unit 2207 (see col. 88, lines 15-17); however there is no disclosure or suggestion for determining, before transmitting, a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed real time data to be present in the playback buffer at the start of decoding of a frame as defined by appealed claim 1.

The rejection to appealed claim 1 asserts that by *Tatsumi et al.* at col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67, teach the transferring the buffer occupancy via the signal and controlling of the retrieving and/or the decoding in dependence on said transferred buffer occupancy as recited by the rejected claims. The appellant, respectfully, point out that columns 87, 88 and 89 of Tatsumi et al. discussed the coding of audio and video signals. There is no decoding that takes place within column 87, 88 and 89 of *Tatsumi et al.* Therefore, all the features of appealed claim 1 are not found within the cited reference, *Tatsumi et al.*

Appealed claim 2

Appealed claims 2 defines subject matter for 2 a signal carrying real time information, in particular audio information, which real time information is encoded to compressed real time data in frames relating to consecutive segments of the real time information, wherein

the signal comprises a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed real time data to be present in a playback buffer at the start of decoding said frame.

In the rejection to appealed claim 2, the Examiner's position is that *Tatsumi et al.* at col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67, teach a signal that carries real time information, in particular audio information, which real time information is encoded to compressed real time data in frames relating to consecutive segments of the real time information, wherein the signal comprises a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed real time data to be present in a playback buffer at the start of decoding said frame. As previously discussed, there is no decoding discussed in col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67 of *Tatsumi et al.* As previously discussed, column 87, 88 and 89 of *Tatsumi et al.* discuss coding and using the audio buffer size to determine when video coding is to take place. It is the appellant's position, that *Tatsumi et al.* is not on point with the subject matter as defined by the appealed claim 2. There is no disclosure, or suggestion, within *Tatsumi et al.* for a signal that carrying real time information that is and encoded to compressed real time data in frames relating to consecutive segments of the real time information, and specifically, wherein the signal comprises a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed real time data to be present in a playback buffer at the start of decoding said frame. Therefore, all the features of appealed claim 2 are not found within the cited reference, *Tatsumi et al.*

Appealed claim 3

Appealed claim 3 defines subject matter a method for recording audio information on a record carrier, the method comprising: encoding consecutive segments of the audio information to compressed audio data in frames, and recording the compressed audio data, determining a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding said frame, and recording the buffer occupancy on the record carrier.

The rejection to appealed claim 3 asserts that *Tatsumi et al.* teach a method for recording audio information on a record carrier, the method comprising encoding consecutive segments of

the audio information to compressed audio data in frames at col. 10, lines 53-64. The appellant, respectfully points out that there is no disclosure on Col. 10, lines 53-64 of *Tatsumi et al.* for encoding consecutive segments of the real time information to compressed real time data in frames. Col. 10, lines 53-64 of *Tatsumi et al.* describe audio that is captured and coded in real time which coding is controlled by a computer. There is no disclosure or suggestion of the subject matter for encoding consecutive segments of the real time information to compressed real time data in frames as defined by appealed claim 3.

The rejection to appealed claim 3 further asserts that *Tatsumi et al.* at col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67 teach recording the compressed audio data, and determining a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding a frame. It should by noted that while many of the claims of *Tatsumi et al.* recite within the preamble a recording medium for recording an audio coding program, there is no actual recording on a recording medium that is taught or otherwise suggested by *Tatsumi et al.* except for the storing of the audio coding program taught, therein. Thus, while *Tatsumi et al.* teach that the audio coding program taught, therein, can be stored on a computer readable medium, there is no disclosure or suggestion within *Tatsumi et al.* for recording of compressed audio data. As previously discussed, decoding is not described on columns 87, 88 or 89 and only encoding using the audio buffer as a test for determining when to encode video signals is discussed.

The rejection to appealed claim 3 further asserts that *Tatsumi et al.* at col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67 teach recording the buffer occupancy on the record carrier. The appellant, respectfully, points out that there is no recording of the buffer occupancy on the record carrier taught or suggested by *Tatsumi et al.*, *Tatsumi et al.* teach data from a video camera that is processed. The appellant again points out, that while certain claims of *Tatsumi et al.* recite within the preamble a recording medium for recording the audio coding program, there is no actual recording on the recording medium that takes places during or as a result of processing disclosed or otherwise suggested. The appellant's position is that using a recording medium for storing the audio coding program does not be read on the subject matter defined by appealed claim 3 for the recording of data that is processed by an audio coding program. There is no disclosure or suggestion within *Tatsumi et al.* for recording the buffer occupancy (or the

equivalent thereof) within the video camera or any other recording medium. Therefore, all the features of appealed claim 3 are not found within the cited reference, *Tatsumi et al.*

Appealed claim 4

Appealed claim 4 defines subject matter for a as defined by appealed claim 3 wherein the buffer occupancy is indicative of the amount of compressed audio data to be present in the playback buffer at the start of decoding said frame before the compressed audio data relating to said frame is removed from said buffer.

Is the rejection to appealed claim 4 asserts that *Tatsumi et al.* at col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67 teach the buffer occupancy is indicative of the amount of compressed audio data to be present in the playback buffer at the start of decoding the frame before the compressed audio data relating to said frame is removed from the buffer. As previously discussed column 87, 88 and 89 of Tatsumi et al. teach encoding and do not mention or otherwise teach decoding. Therefore, all the features of appealed claim 4 are not found within the cited reference, *Tatsumi et al.*

Appealed claim 5

Appealed claim 5 defines subject matter of appealed claim 3, wherein the determining of the buffer occupancy further comprises determining an amount of compressed audio data in a recording buffer before or after encoding said frame.

The rejection to appealed claim 5 asserts that *Tatsumi et al.* at col. 87, lines 32-52 and col. 87, line 62-col. 88, line 67 teach determining the buffer occupancy comprises the step of determining an amount of compressed audio data in a recording buffer before or after encoding the frame. The appellant asserts that *Tatsumi et al.* do not teach or suggest a recording buffer. It should be noted that there are claims within *Tatsumi et al.* that recite with the preamble a recording medium for recording an audio coding program; however, there is no actual recording on a recording medium that is taught or otherwise suggested by *Tatsumi et al.* except for storing the audio coding program taught, therein. Therefore, all the features of appealed claim 5 are not found within the cited reference, *Tatsumi et al.*

Appealed claim 6

Appealed claim 6 defines subject matter for a recording device for recording audio information on a record carrier, the device comprising: a compression element that is configured to encode consecutive segments of the audio information to compressed audio data in frames, and a recording element that is configured to record the compressed audio data on the record carrier, the device comprises an occupancy determinator that is configured to determine a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding the frame, and the recording element is configured to record the buffer occupancy on the record carrier.

The rejection to appealed claim 6 asserts that the subject defined by appealed claim 6 for a recording device for recording audio information on a record carrier is taught by *Tatsumi et al.* The appellant, respectfully points out that *Tatsumi et al.* do not teach or otherwise suggest recording on a record carrier. Appealed claim 6 defines subject matter for a compression element that is configured to encode consecutive segments of the audio information to compressed audio data in frames, and a recording element that is configured to record the compressed audio data on the record carrier. There is no disclosure or suggestion within *Tatsumi et al.* for recording compressed audio data on the record carrier. Furthermore there is no disclosure or suggestion within *Tatsumi et al.* for an occupancy determinator that is configured to determine a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding the frame, wherein the recording element is configured to record the buffer occupancy on the record carrier; because, simply put, there is no recording or placing of data on a record carrier in any way discussed within *Tatsumi et al.* As previously discussed, there are certain claims to *Tatsumi et al.* that recite within the preamble a recording medium for recording an audio coding program. The appellant respectfully points out that these claims simply pertain to a recitation of a computer readable medium and that there is no recording of compressed data, or any data that has been processed, on a recording medium taught or otherwise suggested by *Tatsumi et al.* Therefore, all the features of appealed claim 6 are not found within the cited reference, *Tatsumi et al.*

Appealed claim 7

Appealed claim 7 defines the subject matter for a recording device as defined by claim 6, wherein the device comprises a recording buffer, and the occupancy determinator is configured to determine the buffer occupancy in dependence on an amount of compressed audio data present in the recording buffer before or after encoding the frame. in claim 6, wherein the device comprises a recording buffer, and the occupancy determinator is configured to determine the buffer occupancy in dependence on an amount of compressed audio data present in the recording buffer before or after encoding the frame.

The rejection to appealed claim 7 asserts that *Tatsumi et al.* teach a recording buffer, and the occupancy determinator being configured to determine the buffer occupancy in dependence on an amount of compressed audio data present in the recording buffer before or after encoding the frame. As previously discussed, there is no recording buffer discussed within *Tatsumi et al.* furthermore spaced discussed to his no occupancy determinator configured to determine the buffer occupancy dependent upon the amount of data present in a buffer before after encoding the frame. It should be noted that certain claims of *Tatsumi et al.* recite a preamble for a recording medium for recording an audio coding program. As previously discussed, the recording medium mentioned by *Tatsumi et al.* is only disclosed as a computer readable medium and there is no actual recording on a recording medium that is taught or otherwise suggested by *Tatsumi et al.* Therefore, all the features of appealed claim 7 are not found within the cited reference, *Tatsumi et al.*

Appealed claim 8

Appealed claim 8 defines subject matter for a record carrier carrying audio information, which audio information is encoded to compressed audio data in frames relating to consecutive segments of the audio information, comprising a-buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding the frame.

The rejection to appealed claim 8 taken within the Final Office Action, has taken the position that *Tatsumi et al.* teach the subject matter for a record carrier carrying audio information, which audio information is encoded to compressed audio data in frames relating to consecutive segments of the audio information, comprising a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed audio data to be present

in a playback buffer at the start of decoding the frame. The appellant, respectfully, points out that the rejection to appealed claim 8 has failed to show any record carrier within Tatsumi et al. that contains a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding the frame. There is no record carrier disclosed or suggested by *Tatsumi et al.* that contains a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding the frame. Therefore, all the features of appealed claim 8 are not found within the cited reference, *Tatsumi et al.*

Appealed claim 9

Appealed claim 9 defines subject matter for a record carrier as defined by appealed claim 8, wherein the buffer occupancy is indicative of the amount of compressed audio data to be present in the playback buffer at the start of decoding said frame before the compressed audio data relating to said frame is removed from the playback buffer.

The rejection appealed claim 9 asserts that *Tatsumi et al.* disclose the subject matter for a record carrier having a buffer occupancy indicative of the amount of compressed audio data to be present in the playback buffer at the start of decoding said frame before the compressed audio data relating to said frame is removed from the playback buffer. It is the appellant's position that the rejection to appealed claim 9 has failed to show any record carrier within *Tatsumi et al.* having a buffer occupancy that is indicative of the amount of compressed audio data to be present in the playback buffer at any time. Furthermore, the rejection to appealed claim 9 has failed to show any record carrier within *Tatsumi et al.* that relates to decoding in any manner whatsoever. The rejection to appealed claim 9 has not provided a showing of any record carrier within *Tatsumi et al.* wherein the buffer occupancy is indicative of the amount of compressed audio data to be present in the playback buffer at the start of decoding said frame before the compressed audio data relating to said frame is removed from the playback buffer. Therefore, all the features of appealed claim 9 are not found within the cited reference, *Tatsumi et al.*

Appealed claim 12

Appealed claim 12 defines subject matter for a playback device for retrieving audio information from a record carrier as defined by appealed claim 5, which further comprises a reader that is configured to retrieve the compressed audio data from the record carrier, a playback buffer, and a de-compression element that is configured to decode frames of compressed audio data from the playback buffer to consecutive segments of the audio information, an occupancy reader that is configured to retrieve the buffer occupancy for at least one frame from the record carrier, and a controller that is configured to control at least one of the reader and the de-compression element in dependence on-said the retrieved buffer occupancy.

The appellant, respectfully, points out that the rejection to appealed claim 12, does not indicate where any of the elements defined by reject Claim 12 are found with the cited reference *Tatsumi et al.* The rejection to appealed claim 12 does not showed any playback device for retrieving audio information from a record carrier having a reader configured to retrieve the compressed audio data from the record carrier within *Tatsumi et al.* Neither does the rejection to appealed claim 12 indicate where within cited reference, *Tatsumi et al.*, there exists a playback device or a de-compression element that is configured to decode frames of compressed audio data from the playback buffer to consecutive segments of the audio information. The appellant, respectfully, asserts that there is no an occupancy reader configured to retrieve the buffer occupancy for at least one frame from a record carrier within *Tatsumi et al.* Furthermore, there is no disclosure or suggestion for a controller configured to control at least one of the reader and the de-compression element in dependence on the retrieved buffer occupancy by *Tatsumi et al.* Therefore, all the features of appealed claim 12 are not found within the cited reference, *Tatsumi et al.*

Appealed claim 13

Appealed claim 13 defines subject matter for the playback device as defined by appealed claim 12, wherein the controller is configured to control the de-compression element to start decoding a frame when the amount of compressed audio data in the playback buffer substantially corresponds to the buffer occupancy.

The rejection to appealed claim 13 has taken the position that decoding is taught or suggested b *Tatsumi et al.* As previously discussed, there is no decoding taught or suggested by *Tatsumi et al.* Appealed claim 13 defines subject matter for a playback device, wherein the

controller is configured to control the de-compression element to start decoding a frame when the amount of compressed audio data in the playback buffer substantially corresponds to the buffer occupancy. The rejection to appealed claim 13 does not indicate where within *Tatsumi et al.* there exists a controller that is configured to control the de-compression much less a controller is configured to control the de-compression element to start decoding a frame when the amount of compressed audio data in the playback buffer substantially corresponds to the buffer occupancy a defined by rejected Claim 12. Therefore, all the features of appealed claim 13 are not found within the cited reference, *Tatsumi et al.*

Appealed claim 15

Appealed claim 15 defines subject matter for a record carrier as defined by appealed claim 8, wherein the record carrier comprises frame information for at least one frame, which frame information is located in a header area associated with said frame, and which frame information comprises the buffer occupancy.

The rejection to appealed claim 15 does not provide any indication where within cited reference *Tatsumi et al.* a record carrier exists within *Tatsumi et al.* having frame information located in a header area associated with the frame, and which frame information includes the buffer occupancy. There is no disclosure or suggestion within *Tatsumi et al.* for a record carrier having frame information located in a header area associated with the frame, and which frame information includes the buffer occupancy. Therefore, there remain features defined by appealed claim 15 that are not found within cited reference, *Tatsumi et al.*

Appealed claim 16

Appealed claim 16 defines subject matter for the record carrier defined by appealed claim 9, wherein the record carrier further comprises frame information for at least one frame, which frame information is located in a header area associated with said frame, and which frame information comprises the buffer occupancy.

The rejection to appealed claim 16 does not indicate where within cited reference, *Tatsumi et al.* there exists a record carrier having frame information for at least one frame, which frame information is located in a header area associated with said frame, and which frame information comprises the buffer occupancy. There is no disclosure, or suggestion, within

Tatsumi et al. for a record carrier having frame information for at least one frame, which frame information is located in a header area associated with said frame, and which frame information comprises the buffer occupancy. Accordingly, there are features that are defined by appealed claim 16 that are not taught or suggested by *Tatsumi et al.*

Appealed claim 17

Appealed claim 17 defines subject matter for the record carrier as defined by appealed claim 8, wherein the record carrier comprises a pause area between two audio items, in which pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item.

The rejection to appealed claim 17 does not indicate where within cited reference, a *Tatsumi et al.*, there exists a pause area between two audio items, in which pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item. There is no disclosure or suggestion within *Tatsumi et al.* for pause areas between audio items. Accordingly, there are features that are defined by appealed claim 17 that are not taught or suggested by *Tatsumi et al.*

Appealed claim 18

Appealed claim 18 defines subject matter for a record carrier as defined by rejected claim 9, wherein the record carrier comprises a pause area between two audio items, in which pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item.

The rejection to appealed claim 18, does not indicate where a record carrier exists within cited reference, *Tatsumi et al.*, having a pause area between two audio items, in which pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item. The taught respectfully asserts that cited reference, *Tatsumi et al.*, to teach or suggested a record carrier having a pause area between two audio items, in which

pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item. Therefore the remain features within appealed claim 18 to a found by cited reference, *Tatsumi et al.*

Appealed claim 19

Appealed claim 19 defines subject matter for the 19 record carrier as defined by appealed claim 15, wherein the record carrier comprises a pause area between two audio items, in which pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item.

The rejection to appealed claim 19, does that indicate in where a record carrier exists within cited reference, *Tatsumi et al.*, having a pause area with a series of buffer occupancies indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item. The appellant respectfully asserts that there is no a record carrier within *Tatsumi et al.* having a pause area between two audio items, in which pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item. Therefore, there remain features within pill claim 19 that are not found within cited reference, *Tatsumi et al.*

Appealed claim 20

Appealed claim 20 defines subject matter for the record carrier as defined by appealed claim 16, wherein the record carrier comprises a pause area between two audio items, in which pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item. The rejection to appealed claim 20 does not indicate where within cited reference, *Tatsumi et al.*, there exists in a record carrier of a pause area between two audio items, wherein the pause area a series of buffer occupancies indicate a change in transfer speed from a transfer speed into the PC audio item to a second transfer speed at start of the following

audio item. The appellant, respectfully, and asserts that cited reference, *Tatsumi et al.*, do not disclose or suggested a record carrier having a pause area between two audio items, such that the pause area has a series of buffer occupancies that indicate a change in transfer speed from a transfer speed into the PC audio item to a second transfer speed at start of the following audio item. Accordingly, there are features defined by appealed claim 20 that are not found within cited reference, *Tatsumi et al.*

Appealed claim 21

Appealed claim 21 defines subject matter for a playback device as defined by appealed claim 12, wherein the controller is configured to control the reader to adapt a speed of retrieving the compressed audio data from the record carrier in dependence on a difference between the buffer occupancy and the actual amount of compressed audio data present in the playback buffer at the start of decoding the frame.

The rejection to appealed claim 21, does that indicate where a playback device exists within *Tatsumi et al.* having a controller configured to control the reader to adapt a speed of retrieving the compressed audio data from the record carrier in dependence on a difference between the buffer occupancy and the actual amount of compressed audio data present in the playback buffer at the start of decoding the frame. As previously discussed, *Tatsumi et al.* pertains to encoding not decoding. Accordingly, this rejection is respectfully traversed.

The appellant respectfully asserts that there is no playback device within *Tatsumi et al.* having a controller configured to control the reader to adapt a speed of retrieving the compressed audio data from the record carrier in dependence on a difference between the buffer occupancy and the actual amount of compressed audio data present in the playback buffer at the start of decoding the frame. As previously discussed, teachings of *Tatsumi et al.* pertain to encoding not decoding.

The appellant respectfully points out that appealed claim 21 defines the buffer occupancy to be indicative of an amount of compressed real time data that should be present at a receiver buffer at the start of decoding of the received data. *Tatsumi et al.* do not teach decoding and *Tatsumi et al.* do not teach determining an amount of compressed real time data that should be present in a receiver buffer, or communicating this amount to a receiver. Accordingly, there remain features defined via appealed claim 21 that are not found within *Tatsumi et al.*

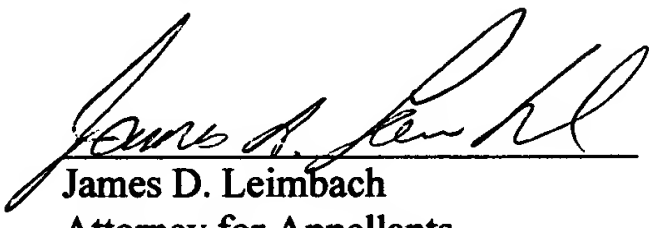
Appealed claim 22

Appealed claim 22 defines subject matter for the playback device as defined by appealed claim 13, wherein the controller is configured to control the reader to adapt a speed of retrieving the compressed audio data from the record carrier in dependence on a difference between the buffer occupancy and the actual amount of compressed audio data present in the playback buffer at the start of decoding the frame. The rejection to appealed claim 22 does not indicate where within *Tatsumi et al.* there exists a controller configured to adapt the speed of retrieving compressed audio in dependence on a difference change the buffer occupancy and the actual long compressed audio in the playback buffer at the start of decoding the frame. Therefore the remain features that are not found within cited reference, *Tatsumi et al.* The appellant, respectfully, asserts that there is no controller configured control the reader to adapt speed of retrieving compressed audio data from the record carrier in dependence on a difference between the buffer occupancy and the actual amount of compressed audio data present in the playback buffer at start of decoding the frame, as defined by appealed claim 22. Therefore there remain features that are defined by appealed claim 22 that are not found within cited reference, *Tatsumi et al.*

Conclusion

In summary, the examiner's rejections of the claims are believed to be in error for the reasons explained above. The rejections of each of claims 1-9, 12, 13 and 15-22 should be reversed.

Respectfully submitted,



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APPENDIX I. Claims on Appeal

1. A method for transferring real time information, in particular audio information, the method comprising:

encoding consecutive segments of the real time information to compressed real time data in frames,

transmitting a signal carrying the compressed real time data,

receiving the signal and retrieving the compressed real time data,

storing the received compressed real time data in a playback buffer,

decoding the compressed real time data from the playback buffer,

determining, before transmitting, a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed real time data to be present in the playback buffer at the start of decoding said frame,

transferring the buffer occupancy via the signal,

controlling the retrieving and/or the decoding in dependence on said transferred buffer occupancy.

2. A signal carrying real time information, in particular audio information, which real time information is encoded to compressed real time data in frames relating to consecutive segments of the real time information, wherein the signal comprises a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed real time data to be present in a playback buffer at the start of decoding said frame.

3. A method for recording audio information on a record carrier, the method comprising:

encoding consecutive segments of the audio information to compressed audio data in frames, and

recording the compressed audio data,

determining a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the

start of decoding said frame, and
recording the buffer occupancy on the record carrier.

4. The method of recording as claimed in claim 3,
wherein
the buffer occupancy is indicative of the amount of compressed audio data to be present in the playback buffer at the start of decoding said frame before the compressed audio data relating to said frame is removed from said buffer.

5. The method of recording as claimed in claim 3, wherein
determining the buffer occupancy comprises the step of determining an amount of compressed audio data in a recording buffer before or after encoding said frame.

6. A recording device for recording audio information on a
record carrier, the device comprising:
a compression element that is configured to encode consecutive segments of the audio information to compressed audio data in frames, and
a recording element that is configured to record the compressed audio data on the record carrier,
the device comprises an occupancy determinator that is configured to determine a buffer occupancy for at least one frame, which buffer occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding the frame, and
the recording element is configured to record the buffer occupancy on the record carrier.

7. The recording device as claimed in claim 6, wherein
the device comprises a recording buffer, and the occupancy determinator is configured to determine the buffer occupancy in dependence on an amount of compressed audio data present in the recording buffer before or after encoding the frame.

8. A record carrier carrying audio information, which audio
information is encoded to compressed audio data in frames relating to consecutive segments of the audio information, comprising a-buffer occupancy for at least one frame, which buffer

occupancy is indicative of an amount of compressed audio data to be present in a playback buffer at the start of decoding the frame.

9. The record carrier as claimed in claim 8, wherein

the buffer occupancy is indicative of the amount of compressed audio data to be present in the playback buffer at the start of decoding said frame before the compressed audio data relating to said frame is removed from the playback buffer.

10-11 (Canceled)

12. A playback device for retrieving audio information from a
record carrier as claimed in claim 5, which device comprises
a reader that is configured to retrieve the compressed audio data from the record carrier,
a playback buffer, and
a de-compression element that is configured to decode frames of compressed audio data from the playback buffer to consecutive segments of the audio information,
an occupancy reader that is configured to retrieve the buffer occupancy for at least one frame from the record carrier, and
a controller that is configured to control at least one of the reader and the de-compression element in dependence on-said the retrieved buffer occupancy.

13. The playback device as claimed in claim 12, wherein the controller is configured to control the de-compression element to start decoding a frame when the amount of compressed audio data in the playback buffer substantially corresponds to the buffer occupancy.

14 (Canceled)

15. The record carrier as claimed in claim 8, wherein
the record carrier comprises frame information for at least one frame, which frame information is located in a header area associated with said frame, and which frame information comprises the buffer occupancy.

16. The record carrier as claimed in claim 9, wherein
the record carrier comprises frame information for at least one frame, which frame information is located in a header area associated with said frame, and which frame information comprises the buffer occupancy.

17. The record carrier as claimed in claim 8, wherein
the record carrier comprises a pause area between two audio items, in which pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item.

18. The record carrier as claimed in claim 9, wherein
the record carrier comprises a pause area between two audio items, in which pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item.

19. The record carrier as claimed in claim 15, wherein
the record carrier comprises a pause area between two audio items, in which pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item.

20. The record carrier as claimed in claim 16, wherein
the record carrier comprises a pause area between two audio items, in which pause area a series of buffer occupancies is indicative for a change in transfer speed from a first transfer speed at the end of the preceding audio item to a second transfer speed at the start of the following audio item.

21. Playback device as claimed in claim 12, wherein the controller is configured to control the reader to adapt a speed of retrieving the compressed audio data from the record carrier in dependence on a difference between the buffer occupancy and the actual amount of compressed audio data present in the playback buffer at the start of decoding the frame.

22. Playback device as claimed in claim 13, wherein the controller is configured to control the reader to adapt a speed of retrieving the compressed audio data from the record carrier in dependence on a difference between the buffer occupancy and the actual amount of compressed audio data present in the playback buffer at the start of decoding the frame.